

**intrinsically safe pressure transmitter,  
for food industry and sanitary applications,  
ATEX version,  
accuracy 0,5 %**



**74-06**  
**Authorization NO. 1599**



**II 1 GD Ex ia IIC Ex ia IIIC**  
**II 1/2 GD Ex ia IIC Ex ia IIIC**

**Certificate :**  
**CESI 06 ATEX 003 X**

Compliance to requirements of directives: ATEX 2014/34/EU - EMC 2014/30/EU - PED 2014/68/EU - RoHS 2011/65/CE

### 8.XSA

**Ignition protection** Ex ia as per EN 60079-0, EN 60079-11, EN 60079-26, atmosphere type GD :

- category 1 <sup>(1)</sup>, marking **II 1 GD Ex ia IIC Ex ia IIIC (cod. 1GD)**;
- category 1/2, marking **II 1/2 GD Ex ia IIC Ex ia IIIC (cod. 2GD)**.

**Temperature classes** <sup>(2)</sup>,

- T6 (T85°C)Ta ≤ 60 °C (cod. **T6B**);
- T5 (T100°C)Ta ≤ 80 °C (cod. **T5B**);
- T4 (T135°C)Ta ≤ 100 °C (cod. **T4B**).

**Measuring ranges:** 0...0,6/0...40 bar, relative; -1...0/-1...+24 bar, relative; 0...0,6/0...16 bar, absolute.

**Output signal:** 4...20 mA (cod. **1**).

**Non-linearity (BFSL):** ≤ ± 0,25 % of the range, according to IEC 61298-2.

**Non-repeatability:** ≤ 0,15 % of the range, according to IEC 61298-2.

**Accuracy:** ≤ ± 0,5% of the range <sup>(3)</sup>.

**Long term drift:** ≤ 0,2 % of span.

**Zero and span adjustment:** ± 10 % span typical.

**Stocking temperature:** -10...+85 °C.

**Response time:** <4 ms (measuring); <150 ms (switching on).

**Emission and immunity:** according to EN 61326, (group 1 - class B; industrial applications).

**Vibration resistance:** 20g (10...2000 Hz, according to IEC 60068-2-6).

**Shock resistance:** 40g (6 ms, according to IEC 60068-2-27).

**Sensor:** ceramic in Al<sub>2</sub>O<sub>3</sub> or piezoresistive.

**Seal fill:** oil for food service (FDA).

**Case:** in AISI 316L, vented up to 16 bar.

**Protection degree:** IP 65 according to IEC 60529 <sup>(4)</sup>.

**Diaphragm and process connection:** in AISI 316L.

<sup>(3)</sup> erro de medição de acordo com IEC 61298-2: Incluída não linearidade, histéresi, não repetibilidade e erro de escala nominal da saída,

<sup>(2)</sup> temperatura ambiente e temperatura de trabalho, com derivação de acordo

com a norma IEC 61298-1); para as escalas com pressão 0...1 bar precisão ≤ ± 0,75%.

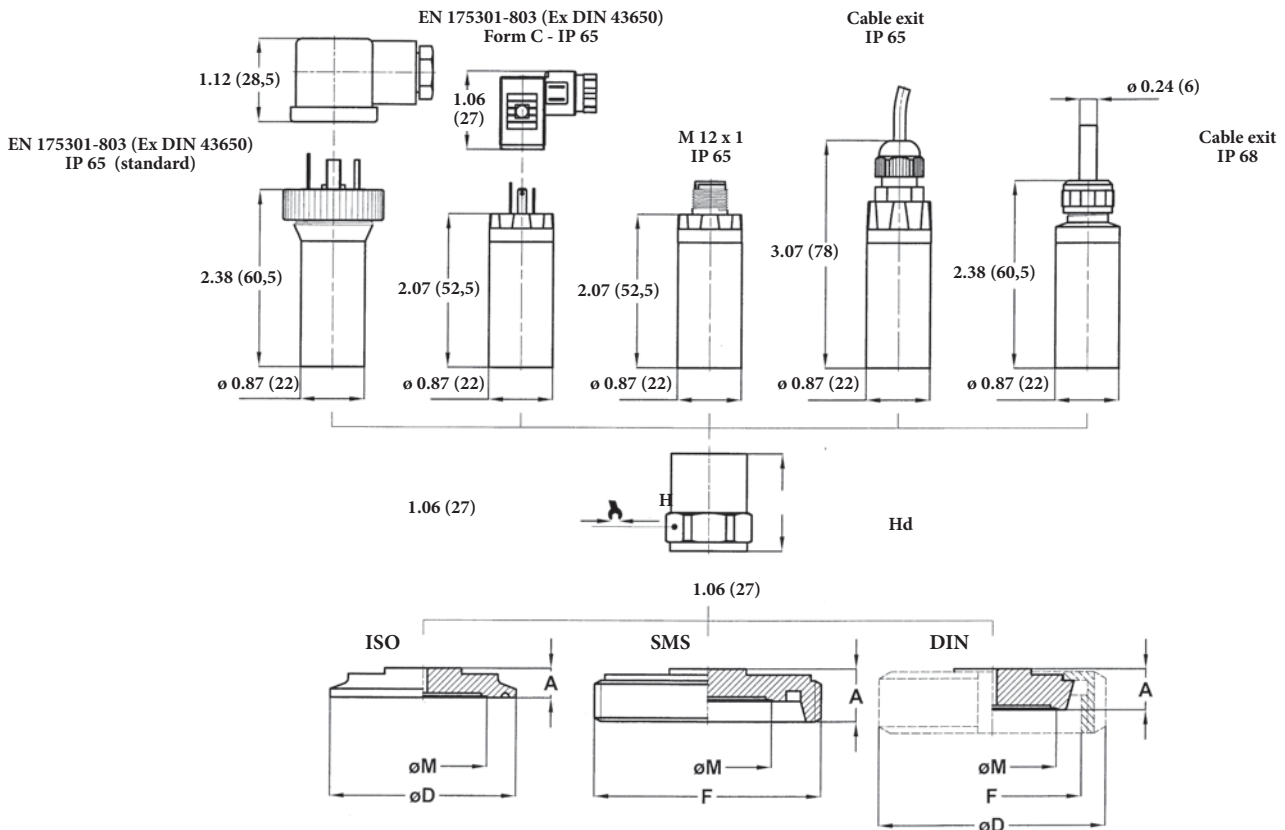
<sup>(4)</sup> não com conexão elétrica de acordo com IEC 61298-2, including non-linearity and hysteresis (limit-point calibration and reference conditions according to IEC 61298-1); accuracy ≤ ± 0,75% of span for measuring range 0...1 bar

(4) with properly assembled electric connection

| Ranges<br>bar, relative (1) | Overpressure<br>bar, relative | Thermal drift<br>% span / °C (2) |
|-----------------------------|-------------------------------|----------------------------------|
| 0...≥ 0,6/0...< 1           | 2,5                           | 0,05/0,04                        |
| 0...1/0...2,5               | 5                             | 0,04/0,03                        |
| 0...4                       | 10                            | 0,02                             |
| 0...6/0...10                | 20                            | 0,02                             |
| 0...16                      | 40                            | 0,02                             |
| 0...25/0...40               | 60                            | 0,02                             |

(1) Other unit of measurement, intermediate ranges, vacuum and compound ranges available upon request.

(2) Thermal drift on connection DIN 11851 DN40F.



| Pn (bar) | H               | Hd              |
|----------|-----------------|-----------------|
| ≤ 1,6    | 1.42"<br>(36,2) | 2.05"<br>(52,2) |
| > 1,6    | 1.23"<br>(31,2) | 1.86"<br>(47,2) |

| Standards                          | DN     | A            | øD             | øM           | F           |
|------------------------------------|--------|--------------|----------------|--------------|-------------|
| <b>BIM</b><br>SMS M (4)            | 2"     | 0.74<br>(19) |                | 1.73<br>(44) | Rd 70 x 1/6 |
| <b>ATO</b><br>ISO 2852 (clamp) (2) | 1" 1/2 | 0.39<br>(10) | 1.98<br>(50,5) | 1.33<br>(34) |             |
| <b>BT0</b><br>ISO 2852 (clamp) (2) | 2"     | 0.39<br>(10) | 2.51<br>(64)   | 1.73<br>(44) |             |
| <b>DT0</b><br>ISO 2852 (clamp) (2) | 2" 1/2 | 0.39<br>(10) | 3.05<br>(77,5) | 2.24<br>(57) |             |

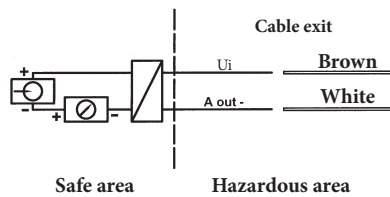
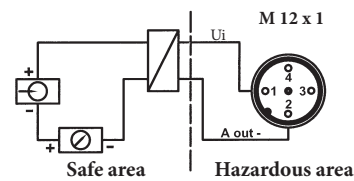
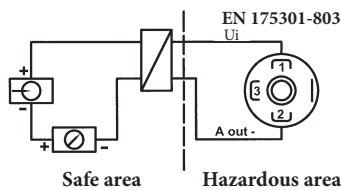
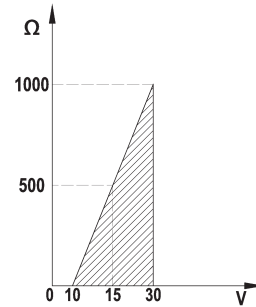
| Standards                         | DN | A            | øD           | øM             | F           |
|-----------------------------------|----|--------------|--------------|----------------|-------------|
| <b>QHF</b><br>DIN 11851 F (1) (3) | 25 | 0.62<br>(16) | 2.48<br>(63) | 0.95<br>(23,5) | Rd 52 x 1/6 |
| <b>SHF</b><br>DIN 11851 F (1) (3) | 40 | 0.62<br>(16) | 3.07<br>(78) | 1.73<br>(44)   | Rd 65 x 1/6 |
| <b>THF</b><br>DIN 11851 F (1) (3) | 50 | 0.66<br>(17) | 3.62<br>(92) | 2.24<br>(57)   | Rd 78 x 1/6 |

dimensions : inches (mm)

- (1) Execution without roller available upon request: pls. contact our Technical Department.
- (2) Execution with clamp, gasket and connection to be welded available on request: pls. contact our Technical Department.
- (3) Gasket System from Siersema Componenten System (S.K.S.) B.V. or Kieslema ASEPTO-STAR k-flex gasket.
- (4) Not available with 3A marking

| Electrical features           |                              |
|-------------------------------|------------------------------|
| N. of wires                   | 2                            |
| Load (Ohm)                    | $R_L \leq (U_i - 10) / 0,02$ |
| Supply (U <sub>i</sub> )      | 10...30                      |
| Max current (I <sub>i</sub> ) | ≤ 100 mA                     |
| Max power (P <sub>i</sub> )   | 1,0 W                        |
| Capacitance (C <sub>i</sub> ) | 19 nF                        |
| Inductivity (L <sub>i</sub> ) | 0 mH                         |

**LOAD RESISTANCE**



**OPTIONS**

| Classification  | II 1GD | II 1/2GD    |
|---|--------|-------------|
| --- - Junction box IP 65, as per EN 175301-803 Form A             |        | T6...T4 (2) |
| <b>SCC</b> - Junction box IP 65, as per EN 175301-803 Form C (1)  |        | T6...T4 (2) |
| <b>M12</b> - Junction box IP 65, M12 x 1 (1)                      |        | T6...T5     |
| <b>PVC</b> - Cable exit IP 65, with PVC cable (1)                 |        | T6...T5     |
| <b>U68</b> - Cable exit IP 68, with vented polyurethane cable (1) | T6     | T6          |

- (1) Zero calibration not available
- (2) silicon gasket when T4 temp. class upon request

**“HOW TO ORDER” SEQUENCE**

Section / Model / Range / Process connection / Output signal / Classification / Temperature / Options  
**8 XSA BIM...DT0 1 1GD T6B SCC... U68**  
**QHF...THF 2GD T5B**  
**T4B**

